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	APPLICATION NO.	PPLICATION NO. FILING DATE FIRST NAMED INVE		ENTOR	NTOR ATTORNEY DOCKET N		
	09/088,163	06/01/98	B MOSER, JR	-	J	960514.ORI	
Γ	-		PM92/0708	- L	E	EXAMINER	
		HUGEN AND NIKOLAI		- -		ILLER, E	
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	MINNEAPOLIS			· 	3641	3	
					DATE MAILED:	07/08/99	

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

·Office Action Summary

Application No. 09/088,163

Applicant(s)

Edward Miller

Examiner

Group Art Unit

3641

Moser



☐ Responsive to communication(s) filed on	
☐ This action is FINAL .	
☐ Since this application is in condition for allowance except for for in accordance with the practice under <i>Ex parte Quayle</i> , 1935 (. •
A shortened statutory period for response to this action is set to e is longer, from the mailing date of this communication. Failure to application to become abandoned. (35 U.S.C. § 133). Extension 37 CFR 1.136(a).	respond within the period for response will cause the
Disposition of Claims	
	is/are pending in the application.
Of the above, claim(s)	is/are withdrawn from consideration.
Claim(s)	is/are allowed.
	is/are rejected.
Claim(s)	is/are objected to.
☐ Claims	are subject to restriction or election requirement.
Application Papers See the attached Notice of Draftsperson's Patent Drawing II The drawing(s) filed on	d to by the Examiner. is approved disapproved. Inder 35 U.S.C. § 119(a)-(d). The priority documents have been Der) International Bureau (PCT Rule 17.2(a)).
Attachment(s) Notice of References Cited, PTO-892 Information Disclosure Statement(s), PTO-1449, Paper Notice of Interview Summary, PTO-413 Notice of Draftsperson's Patent Drawing Review, PTO-948 Notice of Informal Patent Application, PTO-152	
SEE OFFICE ACTION ON TH	E FOLLOWING PAGES

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-4, 9 and 11 are rejected under 35 U.S.C. 102(b) as being fully met by each of Bradford et al. (Example 1, col. 3, e.g.) and Biddle et al. (Example 1, col. 6, e.g. excluding instant claims 3-4).
- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bradford et al. in view of Chi et al., Willer, Fleming, Biddle et al., and Elrick.

Bradford et al. teach the basic invention of a low energy binder of PGA with a nitroplasticizer and the other ordinary ingredients, which is formulated to have a certain energy or HEX, heat of explosion. The amounts are varied as desired to obtain the desired energy, with 8-15% nitroplasticizer, col. 2, lines 19-25, e.g. See also Example 1, col. 3, e.g. Chi et al. and Willer further teach regarding PGA. See Chi et al., col. 5, lines 1-19, teaching the preference for poly (diethylene glycol) adipate, at lines 6-8, which is another way of reciting poly(tetramethylene glycol) adipate, linear 4 x 1 instead of linear 2 x 2. Although at line 10,

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the molecular weight is often 2000-3000, Willer teaches the general situation that the molecular weight may vary up to 20,000 at col. 3, lines 3-6. Where desired in PGA compositions, Fleming teaches the use of dicyandiamide, col. 4, line 59 reinforcing agent. Biddle et al., and Elrick further teach, along with the previous references, variation of amounts of plasticizer and specific notoriously well known ingredients, depending of the desired result. It is well settled that optimizing a result effective variable is well within the expected ability of a person or ordinary skill in the subject art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980), *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955).

5. Claims 1-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 21, nitroglycerine is partly replaced, which renders dependent claim 21 broader and different than claim 20, from which it depends. Broader than that, if one ingredients can be replaced, there is no reason why any ingredient cannot be replaced; therefore, it cannot be determined what the meets and bounds of any of the claims are. In claim 3, e.g., line 2 recited that the polymer is cured, which is an improper method step in a composition claim. It also renders indefinite whether the claims are intended to cover the uncured composition, as in claim 1, or the cured composition as imp[lied in claims 3-4, e.g. These claims are also mutually inconsistent. One may properly recite the presence of an additional ingredient, e.g., curing agent, without reciting a method step. One might also recite

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a cured product, which is the product of curing the [composition]. One should not mix the two. These are exemplary.

- 6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 7. Any inquiry concerning either this or an earlier communication from the Examiner should be directed to Examiner Edward A. Miller at (703) 306-4163.

Examiner Miller may normally be reached daily, except alternate Fridays, from 8:30 AM to 6 PM.

If attempts to reach Examiner Miller by telephone are unsuccessful, his supervisor Mr. Jordan can be reached at (703) 306-4159. The Group fax number is (703) 305-7687.

If there is no answer, or for any inquiry of a general nature or relating to the application status, please call the Group receptionist at (703) 308-1113.

Miller/em July 6, 1999

> EDWARD A. MILLER PRIMARY EXAMINER